

# 5SL Miniature Circuit Breakers

SENTRON Protection, Switching, Measuring and Monitoring Devices



The new 5SL miniature circuit breaker is intended for use up to 6 kA. The devices have the system features characteristic of all Siemens miniature circuit breakers.

#### ■ Main switch characteristics

The 5SL miniature circuit breakers can be used as main switches for the disconnection or isolation of plants. They are also suitable for the quick and easy mounting of additional components, such as auxiliary switches and fault signal contacts.

#### ■ Easy cable entry

To facilitate cable entry, the devices are equipped with square terminals for the joint accommodation of pin busbars with cables from 0.75 to 35 mm<sup>2</sup>. The rated current range is between 0.3 and 63 A. The 5SL miniature circuit breakers are available in characteristics B and C.

#### Highlights

- Attractive design and easily recognizable color-coded switching position indication integrated in the handle
- Easy-to-mount busbar system
- Consistent bus-mounting concept throughout the Siemens miniature circuit breaker range
- Individual devices can be removed from the bus-mounted assembly without the use of tools

# Miniature Circuit Breakers

## 5SL Miniature Circuit Breakers

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### Benefits



- Attractive device design
- Easily recognizable, color-coded switching position indication integrated in the handle.



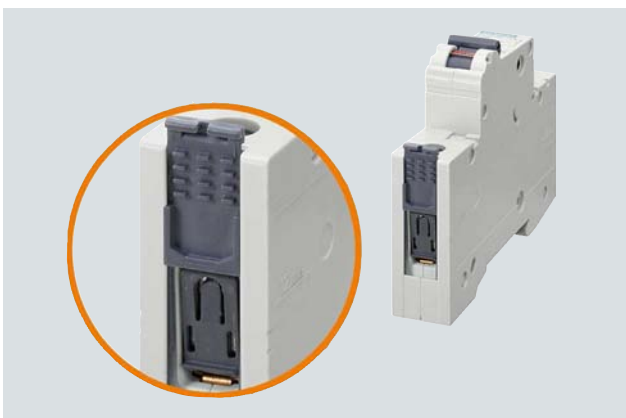
- Ergonomic handle and enclosure for user-friendly switching.



- Square terminal design for accommodation of pin busbars together with cables from 0.75 - 35 mm<sup>2</sup> to facilitate cable entry.



- Easy-to-mount busbar assembly
- Consistent bus-mounting concept throughout the Siemens miniature circuit breaker range.



- Effective touch protection when grasping and manually operating the latching slide with latch-down option.

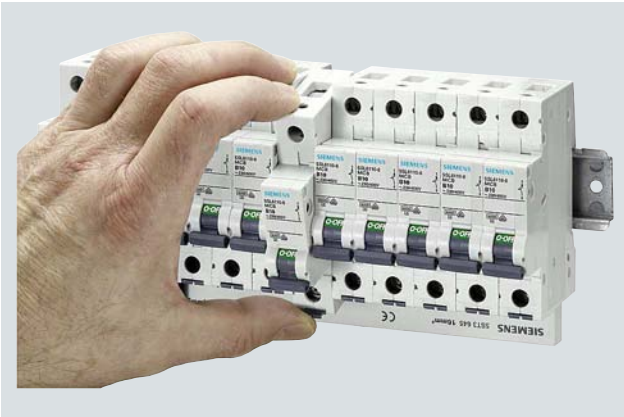


- Terminal for the accommodation of 2 cables of the same cross-section (solid up to 2 x 10 mm<sup>2</sup>, finely stranded with end sleeve, up to 2 x 4 mm<sup>2</sup>).

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- Individual devices can be removed from the bus-mounted assembly without the use of tools.



- The 5SL miniature circuit breakers are ideal for the quick and easy mounting of auxiliary switches and fault signal contacts.

### Technical specifications

		5SL6
<b>Standards</b>		EN 60 898
<b>Approvals</b>		VDE
<b>Tripping characteristic</b>		B, C
<b>Rated voltage <math>U_n</math></b>	V AC	230/400
<b>Operational voltage</b>		
• Min.	V AC/DC	24
• Max.	V AC	250/440
• Max.	V DC/pole	60 <sup>1)</sup>
<b>Rated breaking capacity <math>I_{cn}</math></b>	Acc. to EN 60898	kA AC 6
<b>Insulation coordination</b>		
• Rated insulation voltage	V AC	250/440
• Degree of pollution for overvoltage category		2/III
<b>Touch protection</b>	Acc. to EN 50274	Yes
<b>Handle end position</b> , sealable		Yes
<b>Degree of protection</b>		IP20
<b>CFC and silicone-free</b>		Yes
<b>Conductor cross-sections</b>		
• Solid and stranded	mm <sup>2</sup>	0.75 ... 35
• Finely stranded, with end sleeve	mm <sup>2</sup>	0.75 ... 25
<b>Terminals</b>		
• Terminal tightening torque	Nm	2.5 ... 3
<b>Mounting position</b>		Any
<b>Service life</b> on average, with rated load		20 000 actuations
<b>Ambient temperature</b>	°C	-25 ... +45, occasionally +55, max. 95 % humidity, storage temperature: -40 ... +75
<b>Resistance to climate</b>	Acc. to IEC 60068-2-30	6 cycles
<b>Resistance to vibrations</b>	Acc. to IEC 60068-2-6	m/s <sup>2</sup> 60 at 10 Hz ... 150 Hz




<sup>1)</sup> The operational voltage 60 V DC/pole takes into account a battery charging voltage with a peak value of 72 V.

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## Selection and ordering data

6000 3	$I_n$	Width MW <sup>1)</sup>	DT	Characteristic B		Characteristic C		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
				Order No.	PG	DT	Order No.				
<b>MCB 6000 A</b>											
1P, 230/400 V AC											
	0.3	1	--			A	<b>5SL6 114-7</b>	1	1 unit	001	0.165
	0.5		--			A	<b>5SL6 105-7</b>	1	1/12 units	001	0.165
	1		--			A	<b>5SL6 101-7</b>	1	1/12 units	001	0.165
	1.6		--			A	<b>5SL6 115-7</b>	1	1 unit	001	0.165
	2		--			A	<b>5SL6 102-7</b>	1	1/12 units	001	0.165
	3		--			A	<b>5SL6 103-7</b>	1	1/12 units	001	0.165
	4		--			A	<b>5SL6 104-7</b>	1	1/12 units	001	0.165
	6	A	<b>5SL6 106-6</b>		001	A	<b>5SL6 106-7</b>	1	1/12 units	001	0.165
	8		--			A	<b>5SL6 108-7</b>	1	1/12 units	001	0.165
	10	A	<b>5SL6 110-6</b>		001	A	<b>5SL6 110-7</b>	1	1/12 units	001	0.165
	13	A	<b>5SL6 113-6</b>		001	A	<b>5SL6 113-7</b>	1	1/12 units	001	0.165
	16	A	<b>5SL6 116-6</b>		001	A	<b>5SL6 116-7</b>	1	1/12 units	001	0.165
	20	A	<b>5SL6 120-6</b>		001	A	<b>5SL6 120-7</b>	1	1/12 units	001	0.165
	25	A	<b>5SL6 125-6</b>		001	A	<b>5SL6 125-7</b>	1	1/12 units	001	0.165
32	A	<b>5SL6 132-6</b>		001	A	<b>5SL6 132-7</b>	1	1/12 units	001	0.165	
40	A	<b>5SL6 140-6</b>		001	A	<b>5SL6 140-7</b>	1	1/12 units	001	0.165	
50	A	<b>5SL6 150-6</b>		001	A	<b>5SL6 150-7</b>	1	1/12 units	001	0.165	
63	A	<b>5SL6 163-6</b>		001	A	<b>5SL6 163-7</b>	1	1/12 units	001	0.165	
1P+N, 230 V AC											
	0.3	2	--			A	<b>5SL6 514-7</b>	1	1 unit	001	0.330
	0.5		--			A	<b>5SL6 505-7</b>	1	1 unit	001	0.330
	1		--			A	<b>5SL6 501-7</b>	1	1 unit	001	0.330
	1.6		--			A	<b>5SL6 515-7</b>	1	1 unit	001	0.330
	2		--			A	<b>5SL6 502-7</b>	1	1 unit	001	0.330
	3		--			A	<b>5SL6 503-7</b>	1	1 unit	001	0.330
	4		--			A	<b>5SL6 504-7</b>	1	1 unit	001	0.330
	6	A	<b>5SL6 506-6</b>		001	A	<b>5SL6 506-7</b>	1	1/6 units	001	0.330
	8		--			A	<b>5SL6 508-7</b>	1	1 unit	001	0.330
	10	A	<b>5SL6 510-6</b>		001	A	<b>5SL6 510-7</b>	1	1/6 units	001	0.330
	13	A	<b>5SL6 513-6</b>		001	A	<b>5SL6 513-7</b>	1	1/6 units	001	0.330
	16	A	<b>5SL6 516-6</b>		001	A	<b>5SL6 516-7</b>	1	1/6 units	001	0.330
	20	A	<b>5SL6 520-6</b>		001	A	<b>5SL6 520-7</b>	1	1 unit	001	0.330
	25	A	<b>5SL6 525-6</b>		001	A	<b>5SL6 525-7</b>	1	1 unit	001	0.330
32	A	<b>5SL6 532-6</b>		001	A	<b>5SL6 532-7</b>	1	1 unit	001	0.330	
40	A	<b>5SL6 540-6</b>		001	A	<b>5SL6 540-7</b>	1	1 unit	001	0.330	
50	A	<b>5SL6 550-6</b>		001	A	<b>5SL6 550-7</b>	1	1 unit	001	0.330	
63	A	<b>5SL6 563-6</b>		001	A	<b>5SL6 563-7</b>	1	1 unit	001	0.330	
2P, 400 V AC											
	0.3	2	--			A	<b>5SL6 214-7</b>	1	1 unit	001	0.330
	0.5		--			A	<b>5SL6 205-7</b>	1	1 unit	001	0.330
	1		--			A	<b>5SL6 201-7</b>	1	1/6 units	001	0.330
	1.6		--			A	<b>5SL6 215-7</b>	1	1 unit	001	0.330
	2		--			A	<b>5SL6 202-7</b>	1	1/6 units	001	0.330
	3		--			A	<b>5SL6 203-7</b>	1	1/6 units	001	0.330
	4		--			A	<b>5SL6 204-7</b>	1	1/6 units	001	0.330
	6	A	<b>5SL6 206-6</b>		001	A	<b>5SL6 206-7</b>	1	1/6 units	001	0.330
	8		--			A	<b>5SL6 208-7</b>	1	1 unit	001	0.330
	10	A	<b>5SL6 210-6</b>		001	A	<b>5SL6 210-7</b>	1	1/6 units	001	0.330
	13	A	<b>5SL6 213-6</b>		001	A	<b>5SL6 213-7</b>	1	1 unit	001	0.330
	16	A	<b>5SL6 216-6</b>		001	A	<b>5SL6 216-7</b>	1	1/6 units	001	0.330
	20	A	<b>5SL6 220-6</b>		001	A	<b>5SL6 220-7</b>	1	1/6 units	001	0.330
	25	A	<b>5SL6 225-6</b>		001	A	<b>5SL6 225-7</b>	1	1/6 units	001	0.330
32	A	<b>5SL6 232-6</b>		001	A	<b>5SL6 232-7</b>	1	1/6 units	001	0.330	
40	A	<b>5SL6 240-6</b>		001	A	<b>5SL6 240-7</b>	1	1 unit	001	0.330	
50	A	<b>5SL6 250-6</b>		001	A	<b>5SL6 250-7</b>	1	1 unit	001	0.330	
63	A	<b>5SL6 263-6</b>		001	A	<b>5SL6 263-7</b>	1	1 unit	001	0.330	

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6 000 3		$I_n$	Width DT	Characteristic B		Characteristic C		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
				Order No.	PG	DT	Order No.				
<b>MCB 6000 A</b>											
3P, 400 V AC											
	0.3	3	--		A	<b>5SL6 314-7</b>	1	1 unit	001	0.465	
	0.5		--		A	<b>5SL6 305-7</b>	1	1 unit	001	0.465	
	1		--		A	<b>5SL6 301-7</b>	1	1 unit	001	0.465	
	1.6		--		A	<b>5SL6 315-7</b>	1	1 unit	001	0.465	
	2		--		A	<b>5SL6 302-7</b>	1	1/4 units	001	0.465	
	3		--		A	<b>5SL6 303-7</b>	1	1 unit	001	0.465	
	4		--		A	<b>5SL6 304-7</b>	1	1/4 units	001	0.465	
	6		A	<b>5SL6 306-6</b>	001	A	<b>5SL6 306-7</b>	1	1/4 units	001	0.465
	8		--		A	<b>5SL6 308-7</b>	1	1 unit	001	0.465	
	10		A	<b>5SL6 310-6</b>	001	A	<b>5SL6 310-7</b>	1	1/4 units	001	0.465
	13		A	<b>5SL6 313-6</b>	001	A	<b>5SL6 313-7</b>	1	1 unit	001	0.465
	16		A	<b>5SL6 316-6</b>	001	A	<b>5SL6 316-7</b>	1	1/4 units	001	0.465
	20		A	<b>5SL6 320-6</b>	001	A	<b>5SL6 320-7</b>	1	1/4 units	001	0.465
	25		A	<b>5SL6 325-6</b>	001	A	<b>5SL6 325-7</b>	1	1/4 units	001	0.465
	32		A	<b>5SL6 332-6</b>	001	A	<b>5SL6 332-7</b>	1	1/4 units	001	0.465
40	A	<b>5SL6 340-6</b>	001	A	<b>5SL6 340-7</b>	1	1/4 units	001	0.465		
50	A	<b>5SL6 350-6</b>	001	A	<b>5SL6 350-7</b>	1	1/4 units	001	0.465		
63	A	<b>5SL6 363-6</b>	001	A	<b>5SL6 363-7</b>	1	1/4 units	001	0.465		
3P+N, 400 V AC											
	0.3	4	--		A	<b>5SL6 614-7</b>	1	1 unit	001	0.660	
	0.5		--		A	<b>5SL6 605-7</b>	1	1 unit	001	0.660	
	1		--		A	<b>5SL6 601-7</b>	1	1 unit	001	0.660	
	1.6		--		A	<b>5SL6 615-7</b>	1	1 unit	001	0.660	
	2		--		A	<b>5SL6 602-7</b>	1	1 unit	001	0.660	
	3		--		A	<b>5SL6 603-7</b>	1	1 unit	001	0.660	
	4		--		A	<b>5SL6 604-7</b>	1	1 unit	001	0.660	
	6		A	<b>5SL6 606-6</b>	001	A	<b>5SL6 606-7</b>	1	1 unit	001	0.660
	8		--		A	<b>5SL6 608-7</b>	1	1 unit	001	0.660	
	10		A	<b>5SL6 610-6</b>	001	A	<b>5SL6 610-7</b>	1	1 unit	001	0.660
	13		A	<b>5SL6 613-6</b>	001	A	<b>5SL6 613-7</b>	1	1/3 units	001	0.660
	16		A	<b>5SL6 616-6</b>	001	A	<b>5SL6 616-7</b>	1	1/3 units	001	0.660
	20		A	<b>5SL6 620-6</b>	001	A	<b>5SL6 620-7</b>	1	1 unit	001	0.660
	25		A	<b>5SL6 625-6</b>	001	A	<b>5SL6 625-7</b>	1	1 unit	001	0.660
	32		A	<b>5SL6 632-6</b>	001	A	<b>5SL6 632-7</b>	1	1 unit	001	0.660
40	A	<b>5SL6 640-6</b>	001	A	<b>5SL6 640-7</b>	1	1 unit	001	0.660		
50	A	<b>5SL6 650-6</b>	001	A	<b>5SL6 650-7</b>	1	1 unit	001	0.660		
63	A	<b>5SL6 663-6</b>	001	A	<b>5SL6 663-7</b>	1	1 unit	001	0.660		
4P, 400 V AC											
	0.3	4	--		A	<b>5SL6 414-7</b>	1	1 unit	001	0.660	
	0.5		--		A	<b>5SL6 405-7</b>	1	1 unit	001	0.660	
	1		--		A	<b>5SL6 401-7</b>	1	1 unit	001	0.660	
	1.6		--		A	<b>5SL6 415-7</b>	1	1 unit	001	0.660	
	2		--		A	<b>5SL6 402-7</b>	1	1 unit	001	0.660	
	3		--		A	<b>5SL6 403-7</b>	1	1 unit	001	0.660	
	4		--		A	<b>5SL6 404-7</b>	1	1 unit	001	0.660	
	6		A	<b>5SL6 406-6</b>	001	A	<b>5SL6 406-7</b>	1	1 unit	001	0.660
	8		--		A	<b>5SL6 408-7</b>	1	1 unit	001	0.660	
	10		A	<b>5SL6 410-6</b>	001	A	<b>5SL6 410-7</b>	1	1/3 units	001	0.660
	13		A	<b>5SL6 413-6</b>	001	A	<b>5SL6 413-7</b>	1	1 unit	001	0.660
	16		A	<b>5SL6 416-6</b>	001	A	<b>5SL6 416-7</b>	1	1/3 units	001	0.660
	20		A	<b>5SL6 420-6</b>	001	A	<b>5SL6 420-7</b>	1	1/3 units	001	0.660
	25		A	<b>5SL6 425-6</b>	001	A	<b>5SL6 425-7</b>	1	1/3 units	001	0.660
	32		A	<b>5SL6 432-6</b>	001	A	<b>5SL6 432-7</b>	1	1/3 units	001	0.660
40	A	<b>5SL6 440-6</b>	001	A	<b>5SL6 440-7</b>	1	1/3 units	001	0.660		
50	A	<b>5SL6 450-6</b>	001	A	<b>5SL6 450-7</b>	1	1 unit	001	0.660		
63	A	<b>5SL6 463-6</b>	001	A	<b>5SL6 463-7</b>	1	1/3 units	001	0.660		





1) 1 MW (modular width) = 18 mm.

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6000 A

### Accessories

Rated voltage	MW	DT	Order No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
$U_n$ V							kg
<b>Auxiliary switches (AS)</b>							
For 5SL, 5SP4 and 5SY miniature circuit breakers							
	1 NO + 1 NC	0.5	<b>5ST3 010</b>	1	1 unit	020	0.066
	For small output	C					
	2 NO		<b>5ST3 011</b>	1	1 unit	020	0.055
	For small output	A					
	2 NC		<b>5ST3 012</b>	1	1 unit	020	0.055
	For small output	B					
<b>Fault signal contacts (FC)</b>							
For 5SL, 5SP4 and 5SY miniature circuit breakers							
	1 NO + 1 NC	0.5	<b>5ST3 020</b>	1	1 ST	020	0.056
	2 NO	B					
	2 NC		<b>5ST3 022</b>	1	1 ST	020	0.057
		A					
<b>Handle locking devices</b>							
For 5SL, 5SY, 5SJ and 5SP miniature circuit breakers							
			<b>5ST3 806</b>	1	5 units	020	0.007
<b>Padlocks</b>							
For 5ST3 801 and 5ST3 806 handle locking devices							
			<b>5ST3 802</b>	1	1 unit	020	0.031

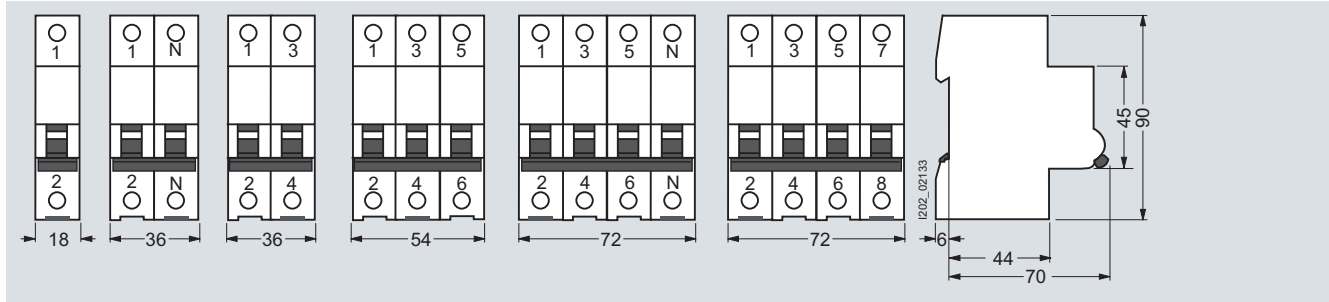
# Miniature Circuit Breakers

## 5SL Miniature Circuit Breakers

**6000 A**

### Dimensional drawings

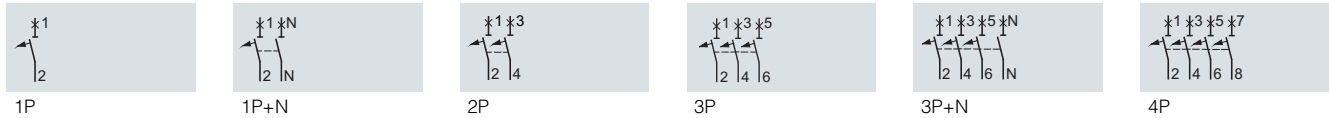
#### 5SL6



### Dimensional drawings

#### Symbols

#### 5SL6



The information provided in this brochure contains descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice.

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